

Appl. No. 10/044,720  
Amdt. dated May 6, 2005  
Reply to the Office Action of 03/08/2005

### **REMARKS/ARGUMENTS**

Reconsideration of this application in light of the following remarks is requested. Claims 1-36 remain pending in this application.

### **Claim Rejections - 35 USC § 103**

(2-3) The Examiner rejected Claims 1-5, 7-10, 12-30, and 32-35, under 35 U.S.C. 103(a) as being unpatentable over Ingle et al. (U.S. Patent Publication 2002/0138524) (hereinafter "Ingle") in view of Chang et al. (U.S. Patent Publication 2003/0050923) (hereinafter "Chang"). The Examiner recites 35 U.S.C. §103. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter "as a whole," and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention "as a whole."

With regards to claims 1 and 26, the Applicants respectfully traverse the Examiner's assertion that the Ingle reference teaches the claim limitation of "providing the EOC to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other." The Applicants further respectfully traverse the Examiner's assertion that "the memory in the assembly engine 108" of the Ingle reference is an adequate teaching of a "virtual buffer" as is set forth in claims 1 and 26. Office Action dated March 8, 2005, page 3, first paragraph. The Applicants respectfully assert that claims 1 and 26 recite "a set of virtual buffers" and that the subject method and computer readable medium limitations specify "providing the EOC to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other."

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The Applicants respectfully assert that Ingle teaches that the assembly process performed by the assembly engine 108 "results in a relatively large marked up document." Ingle, page 3, paragraph 57 (emphasis added). The Ingle reference only contemplates processing data to assemble a single document. This focus of assembling a single document, i.e., a single file or data structure for storing information, is in contrast to the recited limitation of the presently claimed invention, which includes "a set of virtual buffers." This "set of virtual buffers" is further described in the claim itself where "one of the set of virtual buffers" as being "pre-defined to contain EOC with less than a given distance value between each other." The claim language is further supported by the description of the set of virtual buffers in the Applicants' specification. For example, the specification states that "each virtual buffer contains a set of appropriately related EOC." Specification, page 9, lines 21 and 22. "Each of the virtual buffers 404 is then made to contain an EOC and every EOC that is less than a certain 'distance' from it." Specification, page 10, lines 1-3 (emphasis added). It is clear that these virtual buffers of the presently claimed invention are independent and separate from one another, and are substantively different from the single file or data structure of the Ingle reference.

The Applicants respectfully assert that the "set of virtual buffers" specified in claims 1 and 26 is clearly different from the structure of the Ingles reference, which only contemplates assembling a single document that contains information related to the query. The Applicants further respectfully assert that the "set of virtual buffers" specified by claims 1 and 26 are not simply a reiteration of the single document taught by Ingle. The EOC in these claims are each provided to the entire set of virtual buffers, and the processing places the EOC into virtual buffers based upon that EOC relationship, specified by a given distance value, to other EOC that are in the particular virtual buffer within the set of virtual buffers. The Applicants respectfully assert that this is substantially different than the teachings of Ingle, which assemble a single document that contains data that satisfies criteria for that document.

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In addition to the above described differences regarding the structure of the claimed "set of virtual buffers," the Applicants respectfully assert that the teachings of Ingles and Chang, taken either alone or any combination with one another or with the other cited prior art of record, does not teach or suggest "one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other" as is recited for claims 1 and 26. As discussed above, the Ingle reference is limited to forming a single document, and does not teach or suggest "a set of virtual buffers." The Ingle reference does not teach or suggest assembling multiple data objects based upon relationships between and among the individual data objects to be assembled, as opposed to the relationship between the data objects and criteria specified for the assembled data. The Ingle reference is limited to mining data objects from a database and assembling data objects into a summary document according to specified criteria for that summary. Ingle, page 3, paragraph 0052. The Applicants respectfully assert that mining data objects returns data objects that match searching criteria, and does not include comparing data objects to each other in order to produce a set of virtual buffers as is specified by claims 1 and 26.

The Applicants respectfully assert that the Chang reference is also limited to identifying objects based upon the object's similarity to "a user's current query concept." Chang, page 2, paragraph 0028. The Applicants respectfully assert that neither Chang, Ingles, nor any combination of the two cited references, teaches or suggests "a set of virtual buffers" where "each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other" as is set forth in claims 1 and 26. The Applicants respectfully assert that the distance value between each EOC in a virtual buffer, as is described in claims 1 and 26, is different than comparing data objects to a "query concept" since ensuring that EOC have distance values relative to each other allows the attributes of EOC within a particular virtual buffer

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to vary with relation to a particular set of attributes, such as those defined for a query concept of the Chang reference.

Further, the Applicants respectfully traverse the Examiner's assertion that Chang teaches "calculating a distance function from every EOC to every other EOC." The teachings of Chang are limited to determining distances between "a user's current query concept" and samples in a database. Chang, page 2, paragraph 28. The Applicants respectfully assert that this differs from "calculating a distance function from every EOC to every other EOC" as is set forth in claims 1 and 26. The distance determination as set forth in claims 1 and 26 determines the distance between all combinations of EOC, and not the distance between the EOC and a query concept as is taught by Chang. The Applicants further assert that Ingle, taken either alone or in any combination with Chang and/or the other cited references, also does not teach or suggest "calculating a distance function from every EOC to every other EOC" as is set forth in claims 1 and 26.

With regards to claims 12 and 19, the Applicants reference the above remarks concerning "a set of virtual buffers" and "calculating a distance function from every EOC to every other EOC" as they apply to the similar limitations of claims 12 and 19. Based on those remarks, the Applicants respectfully assert that claims 12 and 19 also distinguish over the cited prior art references.

With regards to claims 13 and 20, the Applicants reference the above remarks concerning "calculating a distance function from every EOC to every other EOC" as they apply to the similar limitations of claims 13 and 20, and similarly assert that these claims also distinguish over the cited prior art references.

With regards to claims 9, 18, 25 and 34, the Applicants respectfully traverse the Examiner's assertion that the Ingle reference teaches "further comprising the step of creating virtual summary buffers." The Examiner cites the

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last paragraph at the conclusion of the specification of the Ingle reference as a teaching of this limitation. Office Action dated March 8, 2005, page 4, fourth item, citing Ingle, page 6, paragraph 106. As discussed above with regards to the "set of virtual buffers," the Ingle reference is limited to creating a single document. This single document is created by assembling data into a format for a pre-defined discharge summary. Ingle, page 3, paragraph 46. The Applicants respectfully assert that this "discharge summary" is the "summary document" discussed in the cited portion of the Ingle. Ingle, page 6, paragraph 106.

The Applicants respectfully assert that the recitation of "virtual summary buffers" in claims 9, 18, 25 and 34 indicates that these virtual summary buffers are separate from the "virtual buffers" recited by claims from which these claims depend. The virtual summary buffers are described in the Applicants' specification as being created from the virtual buffers. Specification, page 13, lines 16-17. The Applicants respectfully assert that this differs from the "discharge summary" which is the only assembly of data objects by the Ingle reference. Additionally, the Ingle reference only teaches creating a single summary, in contrast to the plural of "buffers" as is recited by claims 9, 18, 25 and 34. The Applicants submit that the plurality of virtual summary buffers set forth in these claims is significant over the single summary of the Ingle reference since these virtual summary buffers are formed for "the set of virtual buffers" discussed above. The Applicants respectfully assert that "the set of virtual buffers" as claimed is not a simple extension of the single document taught by Ingle since these virtual buffers, and the associated virtual summary buffers, are all independent and separate possible destinations for EOC when "providing the EOC to a set of virtual buffers." This differs from creating a single document (i.e., a single file for storing information) and assembling data into that single document, as is taught by Ingle.

Further, the Applicants respectfully assert that the Chang reference, taken either alone or in any combination with the Ingle reference or other cited prior art

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references, fails to teach the creation of "virtual summary buffers" as is recited by claims 9, 18, 25 and 34.

With regards to claims 10, 14, 21 and 35, the Applicants respectfully traverse the Examiners assertion that the combination of Ingle and Chang teach "applying a comparative analysis filter to remove redundant sub-elements" and "synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value." Office Action Dated March 8, 2005, page 4, fifth item (citing Chang paragraph 0132 and Ingle paragraph 0106).

The Examiner asserts that "concatenating the EOC in each virtual buffer" corresponds to the clustering of Chang. Office Action dated March 8, 2005, page 4, fifth item. The cited portion of Chang refers to a process for identifying image samples to present to a user for purposes of training an image recognition system. Chang, page 6, paragraphs 0131 and 0132. The Applicants respectfully assert that the "clustering" discussed by the Chang reference refers to identifying images that are similar and therefore facilitating the selection of sufficiently different images. For example, Chang states "the query-concept learner process often attempts to select samples from among different clusters of samples." Chang, page 6, paragraph 0132. The Applicants respectfully assert that the clustering taught by Chang is a conceptual association of data objects and is not a teaching or suggestion of "concatenating the EOC in each virtual buffer" as is recited for claims 10, 14, 21 and 35.

The Examiner cites the "summary document" of Ingle as a teaching of "synthesizing summary digests." Office Action dated March 8, 2005, page 4, fifth item. The Applicant respectfully asserts that the subject limitation recites "synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value." The Applicants respectfully assert that the teachings of the Ingle reference are limited

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to creating summary documents based upon mined data and tags marking portions of the mined data. Ingle, page 2, paragraph 0044 to page 3, paragraph 0046. The Applicants respectfully assert that there neither the Ingle or Chang reference, taken either alone or in any combination with one another or other cited prior art, teach or suggest "extracting context-preserving EOC" as is recited by claims 10, 14, 21 and 35.

Additionally, Applicants note that dependent claims 2-5, 7-10, 13-18, 20-25, 27-36 depend from independent claims 1, 12, 19 and 26, respectively. As discussed above, independent claims 1, 12, 19 and 26 distinguish over the cited prior art. Since dependent claims include all of the limitations of the independent claims from which they depend, Applicants further assert that dependent claims 2-5, 7-10, 13-18, 20-25, 27-36 also distinguish over the cited prior art as well. Therefore, Applicants respectfully assert that the Examiner's rejection under 35 U.S.C. §103(a) should be withdrawn.

(4) The Examiner rejected Claims 6 and 31 under 35 U.S.C. 103(a) as being unpatentable over Ingle et al. (U.S. Patent Publication 2002/0138524) in view of Chang et al. (U.S. Patent Publication 2003/0050923) as was applied in the rejection of Claims 1-5, 7-10, 12-30, and 32-35, and further in view of Bull et al. (U.S. Patent Publication 2003/0187726) (hereinafter "Bull").

With respect to the Bull reference, the Examiner stated at the bottom of page 5 that the combination of Ingle/Chang fails to disclose: "wherein the query is received via an agent pushing relevant information to a user based on a user profile." The Bull reference was cited as a combination with the Ingle and Chang references, as stated by the Examiner on page 5, last paragraph, to add Bull's teaching of "an information aggregation and synthesization system comprising an agent and a user profile. The Applicants respectfully point out that "an agent" recited in claims 6 and 31 is explicitly defined as "for pushing relevant information to a user." The teachings of the Bull reference are limited to maintaining user

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profiles. These profiles are used, for example, to present a customized sales presentation (Bull, paragraph 0008) or to narrow information retrieval for the user (Bull, paragraph 0029). The Applicants assert that the Bull reference, taken either alone or in any combination with the Ingle, Chang or other cited prior art references, does not teach or suggest "an agent for pushing relevant information to a user" as is recited by claims 6 and 31. The technology of "pushing relevant information" is a known technology in the art whereby information is transmitted to a user without the user explicitly requesting that particular information transmission. See, Webopedia, "Push: (1) In client/server applications, to send data to a client without the client requesting it." See <http://www.webopedia.com/TERM/p/push.html>. The Applicants respectfully assert that the cited prior art of reference does not teach or suggest using "an agent for pushing relevant information" in the context of the claimed invention, when claims 6 and 31 are considered "as a whole."

The Applicants further respectfully assert that the Bull reference does not teach or suggest the claimed invention as recited for the present independent claims, and for all dependent claims depending therefrom, respectively. Therefore, it is respectfully submitted that the rejection of claims 6 and 31 under 35 U.S.C. § 103(a) should be withdrawn.

#### **Allowable Subject Matter**

(5-6) Applicants wish to acknowledge and thank the Examiner for finding that Claims 11 and 36 would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

#### **Conclusion**

The foregoing is submitted as full and complete response to the Official Action mailed 03/08/2004, and it is submitted that Claims 1-36 are in condition for



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allowance. Reconsideration of the rejection and reexamination is requested.  
Allowance of Claims 1-36 is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Applicants acknowledge the continuing duty of candor and good faith to disclose information known to be material to the examination of this application. In accordance with 37 CFR § 1.56, all such information is dutifully made of record. The foreseeable equivalents of any territory surrendered by amendment are limited to the territory taught by the information of record. No other territory afforded by the doctrine of equivalents is knowingly surrendered and everything else is unforeseeable at the time of this amendment by the Applicants and the attorneys.

**If the Examiner believes that there are any informalities that can be corrected by Examiner's amendment, or that in any way it would help expedite the prosecution of the patent application, a telephone call to the undersigned at (561) 989-9811 is respectfully solicited.**

The Commissioner is hereby authorized to charge any fees that may be required or credit any overpayment to Deposit Account **50-1556**.

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In view of the preceding discussion, it is submitted that the claims are in condition for allowance. Reconsideration and re-examination is requested.

Respectfully submitted,

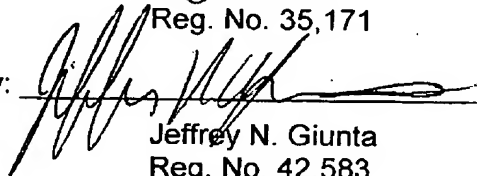
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